INFORMATION SHEET

ORDER NO.
NORCAL WASTE SYSTEMS OSTROM ROAD LANDFILL, INC.
OSTROM ROAD CLASS II SOLID WASTE LANDFILL FACILITY
CONSTRUCTION, OPERATION, AND CORRECTIVE ACTION
YUBA COUNTY

Norcal Waste Systems Ostrom Road Landfill, Inc. (Discharger) owns and operates the Ostrom Road Class II Solid Waste Landfill Facility located in an unincorporated area in Yuba County approximately 14 miles southeast of Marysville. The facility accepts municipal solid wastes and designated wastes. The facility has been in operation since 1995, and to date, approximately 52 acres out of a total landfill development of 221 acres have been constructed and approved for operation. Land use within 1,000 feet of the facility consist of active cattle grazing. Surface water drainage from the site is toward Best Slough and Hutchinson Creek which both eventually flow into the Sacramento River.

Waste discharge requirements (WDRs) are being revised due to a request from the Discharger to modify Discharge Specification No. B.6 that provides requirements for the maximum allowable depth of leachate on the liner system. The previous requirement of no more than 12 inches of leachate as measured from the bottom of the sump was causing the leachate pumps to fail due to excessive cycling. The revised specification allows leachate to be no greater than the depth of the sump, plus three inches. This will allow for safe pump operation as required by Title 27, CCR.

WDRs were revised in 2003 in response to a request from the Discharger to change the configuration of the landfill. The Discharger proposed to incorporate a former 40-foot wide, 4-acre easement extending through the landfill to form a single contiguous disposal footprint of 225 acres. In addition, the Discharger proposed to increase the final height and final cover elevation (finish-grade contours) from 180 feet above mean sea level (msl) to elevation 365 feet msl. These proposals were approved by the previous WDRs.

Prior to adoption of the 2003 WDRs, the Discharger submitted a liner performance demonstration report for all future cells. The engineered alternative for all future cells is a double liner system unless a site-specific demonstration is conducted and indicates that the prescriptive standard or another design complies with the Title 27 performance standards. The double liner system for base areas of the landfill is to consist of the following components, from bottom to top: minimum 6-inch thick compacted subgrade comprised of low plasticity clays, high plasticity clays or clayey sands; secondary 60-mil thick HDPE geomembrane; leak detection geocomposite leachate drainage layer with heat bonded non-woven geotextile on both sides; 2.5 feet of compacted clay with a permeability of 1×10^{-7} cm/s or less (the lower 6 inches is not subject to the permeability requirements); primary 60-mil thick HDPE geomembrane; 12-inch thick LCRS gravel layer; geotextile filter and; 12-inch thick operations layer.

The containment system for side slope areas of the landfill is to consist of a single composite liner containing the following components, from bottom to top: prepared subgrade; 24 inches of compacted clay with a permeability of 1×10^{-7} cm/s or less; 60-mil textured HDPE geomembrane; LCRS geocomposite leachate drainage layer; and 24-inch thick operations layer.

An electrical leak location survey (LLS) must also be conducted after placement of the LCRS gravel to check the integrity of the primary (uppermost) geomembrane in a new cell. The results of the LLS and any repairs to the geomembrane must be included in the relevant construction quality assurance report.

The first encountered groundwater in the continuous water bearing zone is currently approximately 26 to 55 feet below the native ground surface. However, an analysis of maximum anticipated groundwater elevations indicates that up to approximately 15% of the landfill may have groundwater separation distances of 2.5 to 5 feet between wastes and the highest anticipated groundwater including capillary rise. The engineered alternative proposed by the Discharger to mitigate the groundwater separation requirement consists of a 40-mil HDPE geomembrane which will be installed beneath the entire composite liner system to create a barrier to groundwater or capillary rise. The HDPE geomembrane will be an integral part of the base liner system as described above.

At closure, each landfill unit will receive an engineered alternative final cover which is designed and constructed to function with minimum maintenance. The final cover for the top deck will consist of the following from top to bottom: a one-foot thick vegetative soil layer; a 60-mil HDPE geomembrane layer; a low-permeability geosynthetic clay layer (GCL); and a one-foot thick foundation layer. The final cover for the side-slopes will consist of the following from top to bottom: a one-foot thick vegetative soil layer; a geocomposite drainage layer; a 60-mil HDPE geomembrane layer; and a one foot-thick foundation layer.

Volatile organic compounds (VOCs) have been released from Cells 1 and 2 at the landfill. The VOCs have impacted shallow, ephemerally perched groundwater and the Discharger recently initiated an interim landfill gas control system and an automated leachate extraction system as corrective action measures. The 2003 WDRs required the Discharger to submit a Corrective Action Assessment Report to address the VOCs. Corrective action primarily consists of active landfill gas extraction from the landfill units to remove the source of the VOCs.

The facility's current groundwater monitoring network consists of background monitoring wells MW-1, MW-2 and MW-3 and detection monitoring wells MW-4 through MW-8. Additional monitoring wells will be installed and monitored as the landfill expands. A gas detection monitoring program is also required to detect a release of gas-phase concentrations of VOCs from the landfill.

The revised WDRs continue to require the Discharger to implement a corrective action monitoring program to demonstrate the effectiveness of the corrective action measures. The corrective action monitoring points include the following: piezometers screened in shallow, ephemerally perched groundwater; unsaturated zone monitoring points and; gas monitoring locations both within and outside of Cells 1 and 2.

30 May 2006
WLB